

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  P251504PC-La	<b>FOR FURTHER ACTION</b> <div style="text-align: right; font-size: small;">see Form PCT/ISA/220 as well as, where applicable, item 5 below.</div>	
International application No.  PCT/EP2005/001593	International filing date (day/month/year)  14/02/2005	(Earliest) Priority Date (day/month/year)  13/02/2004
Applicant  GLYCOTOPE GMBH		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☒ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☒ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2005/001593

## Box No. 1 Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the International search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☒ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☒ contained in the international application as filed
    - ☐ filed together with the international application in computer readable form
    - ☒ furnished subsequently to this Authority for the purpose of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2005/001593

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12P19/26 C07K14/535 A61K38/17 G01N33/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12P C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/016329 A (DEUTSCHES KREBSFORSCHUNGSZENTRUM STIFTUNG DES OEFFENTLICHEN RECHTS; PA) 27 February 2003 (2003-02-27) abstract page 11, paragraph 1 - page 15, paragraph 4; figures 1-6	1-5, 9-23
Y	abstract page 11, paragraph 1 - page 15, paragraph 4; figures 1-6	6-8
Y	VISWANATHAN KARTHIK ET AL: "Engineering sialic acid synthetic ability into insect cells: identifying metabolic bottlenecks and devising strategies to overcome them." BIOCHEMISTRY. 30 DEC 2003, vol. 42, no. 51, 30 December 2003 (2003-12-30), pages 15215-15225, XP002334628 ISSN: 0006-2960 abstract; figures 1-8	6-8

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

5 July 2005

Date of mailing of the international search report

15/07/2005

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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2005/001593

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JACOBS C L ET AL: "Substrate specificity of the sialic acid biosynthetic pathway." BIOCHEMISTRY. 30 OCT 2001, vol. 40, no. 43, 30 October 2001 (2001-10-30), pages 12864-12874, XP002334629 ISSN: 0006-2960 abstract ✓	1-8
X	WO 00/52135 A (HUMAN GENOME SCIENCES, INC; JOHNS HOPKINS UNIVERSITY; UNIVERSITY OF WY) 8 September 2000 (2000-09-08) abstract; claims 26-45; figures 1-5,37 ✓	1-8
X	FUKUDA M ET AL: "Structures of novel sialylated O-linked oligosaccharides isolated from human erythrocyte glycoporphins." THE JOURNAL OF BIOLOGICAL CHEMISTRY. 5 SEP 1987, vol. 262, no. 25, 5 September 1987 (1987-09-05), pages 11952-11957, XP002334630 ISSN: 0021-9258 the whole document ✓	1-8
T	JONES MARK B ET AL: "Characterization of the cellular uptake and metabolic conversion of acetylated N-acetylmannosamine (ManNAc) analogues to sialic acids." BIOTECHNOLOGY AND BIOENGINEERING. 20 FEB 2004, vol. 85, no. 4, 20 February 2004 (2004-02-20), pages 394-405, XP002334631 ISSN: 0006-3592 ✓	1-23

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/001593

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03016329	A	27-02-2003	WO 03016329 A2	27-02-2003
			EP 1419176 A2	19-05-2004
			US 2005042714 A1	24-02-2005
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WO 0052135	A	08-09-2000	AU 3508300 A	21-09-2000
			CA 2363297 A1	08-09-2000
			EP 1399538 A2	24-03-2004
			JP 2003524395 T	19-08-2003
			WO 0052135 A2	08-09-2000
			US 2002142386 A1	03-10-2002
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